WEBINAR 4: PRACTICAL EXPECTATIONS FOR SYSTEM PERFORMANCE AND ANTICIPATED STAKEHOLDER BENEFITS

SUMMARY

I. Background

On June 23, 2009, the U.S. Environmental Protection Agency (EPA) held a webinar to discuss practical expectations for system performance and anticipated stakeholder benefits from the e-Manifest system. This was the fourth webinar that EPA has held to solicit user input into the design, development, and operation of the national system. The system would be an alternative to the current paper-based procedures found in 40 CFR Parts 262 to 265.

Section II of this document summarizes the webinar. Section III presents comments about the e-Manifest that were e-mailed to EPA before or after the webinar. A table of attendees is included at the end of this document. The presentation slides used during the webinar are provided as a separate attachment.

II. Summary

II.1 Introduction and Summary of EPA Expectations for System Performance

The facilitator began the webinar by conducting a roll call to identify all attendees. She then discussed a number of EPA's expectations for system performance:

- EPA expects that the e-Manifest will offer some real-time service, but also have off-line capabilities. The off-line capabilities will address users in places where the internet is inaccessible, people who prefer to work off-line and upload manifests in batches, and times when the system is unavailable temporarily due to system outages. EPA does not expect to allow use of an electronic manifest unless all handlers involved in the shipment participate in the electronic system.

- The e-Manifest will automate the current paper system, but submission requirements and procedures generally will remain consistent with existing regulations. The system will allow the same

set of federal RCRA wastes and state-regulated wastes to be manifested. EPA will continue to coordinate with Department of Transportation (DOT) requirements, which may allow electronic shipping papers in the future. Any changes made in e-Manifest (*e.g.*, more precise recording of quantities received) also could be made to paper manifests. In addition, the system will be designed to be flexible enough to accommodate future changes in legislation, rulemakings, and technology.

- The use of electronic manifests will not be mandatory, but in order for the system to be complete, EPA expects to require all manifests — paper and electronic — to be submitted to the system. A fee will be assessed to process electronic and paper manifests and to support the system in the long term. The integration of electronic and paper forms may not take place immediately; electronic management of paper manifests may be phased in over time. The most effective way to collect and process paper manifests has to be determined.

- EPA is considering implementing the e-Manifest in steps to ensure that each component works properly. Integration with the Biennial Report is expected to occur early on. Other components are expected to be phased in during later stages, including transboundary waste tracking systems, exception and discrepancy reporting, and land disposal restrictions (LDR) notifications.

- The Agency is continuing to work internally on a range of issues, including electronic signatures, confidential business information (CBI), coordination with DOT, integration with rail systems, and the system's fee structure.

Ms. Wright asked how the Biennial Report could be integrated into the system before transboundary shipments, exception reports, and discrepancy reports, since the Biennial Report is a summary that includes this information. Mr. LaShier stated that transboundary shipments involve a larger set of stakeholders and a more complicated workflow, so additional time is needed to address them. Even though transboundary shipment data, exception reports, and discrepancy reports would not be integrated until down the road, they would continue to be collected through existing methods; hence, this information would be available for the Biennial Report and other purposes.

Mr. Appelt pointed out that a company might transact some of its manifests in paper and others electronically. He asked whether the company could enter its paper manifests into its in-house system and then upload them in batches with electronic manifests to the e-Manifest system. Mr. LaShier responded that the Agency will have to develop a protocol to upload data from paper manifests.

Mr. Appelt also stated that only the Biennial Report had been mentioned thus far during the webinar, but he hoped that the e-Manifest also would address state-specific reporting. A response was provided that the Agency was using "Biennial Report" as a shorthand for all summary reports. EPA intends to address both federal and state reports in the system.

Mr. Griffith asked if EPA expects for the e-Manifest to be implemented before the integration of paper manifests into the system. He expressed concern that, without integration of paper manifests, the Biennial Report would be either incomplete or incorrect. Mr. LaShier responded that EPA will need to determine an appropriate timeframe for transitioning from collection of paper manifests by states to collection by the national operator. At the present time, the Agency does not know how long the transition will take.

Ms. Keillor commented that export reports are a good candidate for integration into the system. Mr. LaShier responded that EPA hopes to integrate import and export tracking capabilities into the system.

Mr. Fronczak asked why paper manifest users should have to pay a fee for the electronic system. Mr. LaShier responded that the fee is for the burden on staff to receive and process the paper-based data; these data will be entered manually into the national system. There is legislation being drafted that requires full cost recovery in implementing the system. Any electronic system will require a fee to be self-sustaining. Similarly, there are costs associated with the current collection of paper manifests by the states, although they are not as transparent.

Mr. Hill expressed concern about EPA's plans to roll out the e-Manifest in phases. For example, it would compel New York to implement multiple systems for processing and maintaining data from waste handlers (*e.g.*, manifest discrepancies). In addition, a phase-in would cause difficulties for states that already have invested in in-house tracking systems as well as for TSDFs, which manage waste and billing electronically. Mr. LaShier clarified that, although the discrepancy and other reports would be

phased in over time, states will continue to collect them in paper format until the phase-in, and hence, states will continue to have access to them.

Ms. Wright asked if EPA expects that the Biennial Report will continue as it operates currently until the e-Manifest system is complete. It appears that there are a lot of issues yet to resolve, so Biennial Report integration should be last. Mr. LaShier responded that EPA will determine how best to integrate the Biennial Report given the potential difficulties, but the Agency wants to integrate it early. The Agency needs to plan the integration carefully to minimize disruptions.

Ms. Michel asked who would be responsible for paying the fees to operate the system. Mr. LaShier responded that the legislation merely would give EPA the authority to collect fees. A fee structure will be determined after a contractor is selected and begins designing the system. EPA will discuss potential fee structures with the user community.

Mr. Baker said that the transition to electronic manifests will be difficult, but the fees should be structured to encourage the use of the electronic system, not paper.

Mr. Griffith said that the first Biennial Report should be submitted in parallel with the first year's e-Manifest data to enable data comparisons, debugging, and quality assurance. He also suggested automated quality assurance/quality control (QA/QC) feedback to data submitters. There also should be a fee incentive for the TSDFs to submit electronic data.

Mr. Green asked who would perform the data entry for the e-Manifest. Mr. LaShier responded that this had not been decided yet. Some states may want to continue collecting and entering data. The national operator also could perform this.

II.2 User Expectations on Quality

The facilitator asked participants to discuss the ways in which the e-Manifest could affect the quality of the work they do.

Ms. Bell stated that she had a preliminary list of answers, but they had not been vetted by senior staff. She agreed to e-mail the answers after the webinar.

Mr. Appelt said that Safety-Kleen sees potential improvements in data quality because fewer people will be keypunching information into the system. As a result, keypunching errors will be reduced.

Mr. Green said that he hoped to see improved data quality, especially if more accurate quantities are provided and the TSDF is able to report the weight of the waste received. In addition, the system will provide data that may not be reported to the states currently, such as information on conditionally exempt shipments. Mr. LaShier responded that some states require conditionally exempt small quantity generators (CESQGs) to use manifests, but the federal program does not. Mr. Green replied that a lot of conditionally exempt shipments use manifests in his state, but not all of them.

Mr. Westcott said that data quality depends in part on giving the data entry person access to all handler information from RCRAInfo and state systems. The state of Connecticut is concerned about incorrect generator information on manifests (*e.g.*, identification (ID) numbers, names, addresses), even on pre-printed manifests.

Mr. Hammerberg said that the state of Maryland currently performs data entry. With the new system, the state will have more opportunities to make use of the data. For example, the state will be able to look at what facilities are handling, and it will be easier to access manifest data during inspections. The state also will examine waste codes for specific initiatives, like reducing mercury. The big advantage will be getting access to the data in a timely fashion and querying data via a reporting interface.

Ms. Wright stated that TSDFs do need to report shipments received from small quantity generators (SQGs) on the Biennial Report, at least in a summary fashion, so EPA will need to think about how to handle that. She believes the e-Manifest could help to improve compliance oversight. For example, the state of Illinois cited a lot of transporters for not putting waste into storage when they held it for over 10 days. The state could increase its compliance oversight using the e-Manifest because the data would be more readily available.

Mr. Griffith said that this system will be advantageous for the Florida Department of Environmental Protection. For example, it will have access to data that will allow it to create reports. It will be able to see if a generator changes its generated quantities or if a SQG has LQG-type shipments.

Mr. Broome said that, as an employee of a TSDF, he did not anticipate any improvements to the quality of its work because it already has all of its data computerized. The e-Manifest probably will make corrections quicker, but there will not be many other quality improvements for its process.

Mr. Burman said that the state of Minnesota requires CESQG shipments to be manifested. Due to logistical constraints, it does not collect all of the data on CESQG shipments. The e-Manifest system would allow it to access a large pool of data that currently are unavailable to the state except through individual inspections. This would increase the volume of data available and allow the state to track all shipments within its borders, which it stopped doing because the volume of data was overwhelming.

Mr. Westcott expressed concern that some sites claim to be a CESQG but are incorrect. He asked how the system could be used to help transporters quickly and easily verify a site's generator status.

Ms. Michel said that the state of New Hampshire would see a reduction in staff time. The state would not see a change in the quality of data other than the reduction in errors. She also seconded the comments made by Mr. Appelt.

Ms. Keillor said that her company sees a lot of data entry errors committed by the states. When the states send data to her company to correct, there is a lot of work to do on its end, when it was the state's data entry error. States also ask for additional information when they cannot read a paper copy, so those cases would be eliminated. Her company often has to get the corrected information from the generator or its own data systems. When her company prepared one of the state's annual reports this year, 40 of 111 manifests had errors that the TSDF did not make. Her company spends a significant amount of time each month interacting with states to correct manifests that have errors. There is also confusion among states on what to do with rejected loads. Additionally, there can be confusion when dealing with generator wastes from different states. Some states require CESQG manifesting while others do not, so perhaps a central database would address these issues.

Mr. Hill said that he is concerned about data quality. When the new manifest format was introduced in 2006, New York built a robust data system that currently holds over 2 million records and is capable of producing a few dozen reports. This system has gone through three update cycles. The state already has a system that works well and meets all of its desired functions. He does not see a big difference in what the e-Manifest would offer in terms of improved quality.

Ms. Anderson said that she would submit her comments via e-mail.

Mr. Fronczak said that the manifest is the only paper shipping document that rail transporters have to deal with. Since they currently have to key it into their systems, the e-Manifest would minimize data entry errors.

Mr. Baker stated that his company does not expect a great improvement in data quality when inputting/completing manifests as its current business systems include many checks and balances to assure manifest data meet regulatory requirements. For those handwriting or typing manifests from scratch, there could be significant data quality improvements. He estimated that less than 25 percent of his customers create manifests using their own work processes and less than half are created from scratch.

II.3 User Expectations on Efficiency

The facilitator asked participants to discuss the ways in which they expect the e-Manifest to affect the efficiency of the work they do.

Mr. Fronczak said that efficiency goes hand-in-hand with quality. His organization will not have to enter data, which will be more efficient. This is the key benefit of the system.

Ms. Anderson said that she would submit her comments via e-mail.

Mr. Hill said that the Biennial Report would be much more efficient if integrated into the system. The state of New York would have a single data set, so it would not have to compare two data sets. Since the data would be checked logically on input, it would not have to check the data later. For example, the system presumably would prevent users from entering the wrong ID number and allow users to complete the manifest using templates that contain reliable data.

Ms. Keillor said she anticipated some efficiency in assisting customers with proxy manifest generation. In addition, her company anticipates doing batch uploads at the end of the shipment. She also said that templates would create efficiencies because they would help to ensure that correct data are entered onto the manifest. Her company now has to correct a lot of waste codes and other information.

Ms. Michel said that she did not know if the state of New Hampshire would see an efficiency gain from the e-Manifest. Currently, it keys in ID numbers from manifests to ensure that they match the submitting companies' ID numbers. The state might perform more checks after it uploads the data.

Mr. Broome said that he anticipated that fewer forms would need to be scanned into electronic format, and hence, there would be a reduction in illegibly scanned forms. In addition, the e-Manifest would make repeat business easier for his company and customers (*e.g.*, because of stored data) and allow immediate feedback on validation when data are entered into the system.

Mr. Griffith said that the state of Florida would see extra workload because it never collected manifests before, but it would be better than collecting paper forms. Compared to the alternatives, the e-Manifest would be more efficient.

Ms. Wright said that, unless the system forces the entries to be corrected before they become official, her state would see an increase in errors and workload.

Mr. Hammerberg said that the state of Maryland sees an advantage to the e-Manifest even if the Biennial Report is not integrated. His state could use the e-Manifest to see who is in the regulated community and it could avoid sending forms to sites that no longer exist. With more accessible data to see who is transporting waste, the system would create more enforcement possibilities.

Mr. Westcott said that the state of Connecticut just now is finishing up the quality control process for the year 2007 manifests. A national system would allow the state to act on information in a more timely manner.

Mr. Green said that the state of Missouri would see a decrease in the amount of work it has to do with state reporting requirements, assuming that all paper manifests are loaded into the system. This would eliminate most of its reporting requirements. Looking at data from last year, if this system were in place, fewer than 40 handlers out of 2,500 still would have to file a state report. Of the 44,000 waste records for which the state does data entry, this system would eliminate 96 percent just by being able to load the data into the system.

Mr. Appelt said that keypunching would be reduced, and reporting efficiencies would be gained. Eliminating paper-based reports would be a big efficiency gain.

Ms. Bell said that the manifest data collected by the state of Texas are reported by the TSDF, and the reporting system tracks all of the errors. The system in place checks for invalid data. She asked whether eight-digit waste codes would be allowed in the system and whether there would be

checks to ensure people enter the correct codes. Mr. LaShier responded that this was discussed in the first webinar. Specifically, there was a discussion on how to build in data checks and check against information in existing data systems. The Agency is looking closely at using existing data sources to provide these data checks. Ms. Bell asked if the system would allow a user to go back to correct data. Mr. LaShier said this ability would be allowed in the system.

Mr. Baker said that he anticipated the greatest efficiency gains for industry when all manifesting is electronic. During the transition to 100% electronic manifesting, industry will need to maintain two parallel systems (paper and electronic), which is costly and may actually increase costs in the short-term. As a result, fees for paper manifest users should be established in a manner to encourage them to move to the e-Manifest system. In addition, he stated that waste handlers would see efficiency gains under the e-Manifest for no longer mailing manifest copies to generators and states and filing paper copies. Because his company's manifest creation and facility receipt procedures are highly automated, it does not anticipate great gains in efficiency. On the other hand, if the Biennial Report could be eliminated, there would be significant savings on the reporting side.

II.4 Users' Lingering Concerns

The facilitator asked participants to raise any lingering concerns about how the e-Manifest could affect their operations.

Mr. Appelt expressed concern about the user fees. If not levied properly, fees could cause industry to be less interested in the system. Also, a state representative mentioned that the e-Manifest could be used as a tool to increase enforcement for manifest errors. Obviously, errors need to be corrected, but the system should not be used exclusively for that purpose because it would discourage participation.

Mr. Green said that he was curious how the system would handle atypical manifests or atypical waste streams.

Mr. Westcott said that his main concern was funding because his state has no way to pay to revamp its system. He asked if EPA would provide funding to the states.

Mr. Hammerberg said he was concerned about the system's interface. It should be user friendly, intuitive, and streamlined. The state of Maryland

had its own data management system in development for several years and it was very complicated.

Ms. Wright said that she is concerned that items that states require to be on manifests would not be available in the electronic system. For example, Illinois has the Special Waste category that can be described on a paper manifest but would be difficult to describe in the e-Manifest. Additionally, many landfill facilities probably do not have internet access. She also expressed concern about funding.

Mr. Griffith expressed concern about the amount of access to data that states would have. He wants to ensure that states can get data in a timely fashion and be able to create ad hoc reports.

Mr. Broome expressed concern that real-time tracking in the system could result in false positive reporting and/or invalid data in the system. As such, real-time tracking might interfere with day-to-day operations. He does not want to have a shipment disrupted because of a manifesting error. He also expressed uncertainty about the types of authorizations that would be needed for electronic signatures. He stated that user equipment should be capable of doing what the system requires.

Mr. Burman expressed two concerns. First, he was concerned about accessibility and the interaction between the new system and existing state systems. His state's current system tracks trends and allows it to target inspections, look for discrepancies, and perform other functions. He does not want to lose the data and/or capabilities if they migrate to a federal system. His other concern was the ability of CESQGs to have access to the system. Like several other states, the state of Minnesota requires all shipments of hazardous waste to be manifested. It would be a major concern if there were an impediment to CESQGs using this system. They are mostly small businesses. They should not be forced to use the paper system only.

Ms. Michel said that her concern is the ability to transfer the data from the e-Manifest to her state's system. Another major concern is the timeframe for integrating the e-Manifest into her state's system because the state will have to make changes to its regulations and data processing. In addition, she expressed a desire to be notified when a change is made to a manifest.

Ms. Keillor said that some states require manifesting by CESQGs, but these CESQGs may not have ID numbers. This will need to be addressed in the system. In addition, she asked how errors would be managed when TSDFs

upload batches of forms to the system. She does not want the whole batch to be rejected solely because one manifest has an error. It should reject only that one manifest.

Mr. Hill said that he is concerned that the system would be tailored to the needs of the average state. For states that do not computerize their data, the e-Manifest would be a great advantage. However, EPA needs to consider carefully how to integrate the system effectively with states that already computerize their data. He also expressed concern about the phased approach being discussed. He pointed out that the e-Manifest has been discussed for almost a decade. By definition, phasing in the e-Manifest and Biennial Report functions would leave everyone with two systems at first – paper and electronic. Unmanifested hazardous waste is an example of data that would have to be entered into the system. EPA should consider simple methods to transfer information easily from paper to electronic systems (*e.g.*, "backdoor" methods). Finally, the system should be intertwined with RCRAInfo. All of these concerns should be addressed in the first iteration of the system's roll out.

Ms. Anderson seconded earlier comments from other states regarding the level of state access to data and funding issues.

Mr. Fronczak stated that the railroads have been ready to implement this system for a long time. However, he expressed concern that the e-Manifest could interfere with their Electronic Data Interchange (EDI) systems. The e-Manifest should interoperate with their existing EDI systems and not create a new system for them. Also, electronic signatures need to be streamlined.

Mr. Baker expressed concerns about the business confidentiality of consolidated electronic data; state-specific manifest requirements that could complicate development of the e-Manifest system; and establishment of a fee system that encourages users to adopt the e-Manifest. He stated his expectation that these concerns would be addressed and not prohibit his company's participation in the system.

Ms. Keillor said that there have been situations where the generator and consignment states cannot agree on whether an ID number is necessary. She asked how this disagreement would be resolved in the system. She also asked if the system would allow the creation of a manifest without an ID number (*e.g.*, for wastes regulated under the Toxic Substances Control Act). Mr. LaShier responded that EPA needs to work on this question. Many users would like for the system to flag a missing ID number but not make it a fatal error, *e.g.*, since not all CESQGs have an ID number.

Mr. LaShier clarified EPA's approach for phasing paper manifests into the national system. EPA intends to create a unified system of paper and electronic manifests; however, it does not want to begin integrating paper manifests until it sees an adequate level of electronic manifesting. If, for example, EPA begins collecting paper manifests when only a small percentage of manifests are transacted electronically, the Agency would find itself in the undesirable position of collecting and entering potentially millions of paper manifests into the system. In this respect, EPA needs to determine what an adequate level of electronic manifesting is for purposes of beginning the integration of paper manifests into the system. The Agency also needs to determine how to encourage the use of electronic manifests generally.

Mr. LaShier also noted that EPA staff are working with DOT on the department's plans for an electronic shipping paper. DOT has a new project aimed at allowing electronic shipping papers by the year 2012. EPA and DOT will meet at the end of June about aligning with that effort. For example, they will need to figure out how to inform emergency responders about the chemical hazards of a transportation accident if there is no physical shipping paper.

II.5 Next Steps and Wrap Up

The facilitator described next steps in the e-Manifest process:

- Legislation is needed to authorize EPA to build and operate the system. A bill may be introduced into the House of Representatives before the July 4th recess, and a Senate version is being closely coordinated.[1] Mr. LaShier stated that EPA cannot control when bills are introduced in Congress. The facilitator said EPA anticipates that the legislation will likely require EPA to have authorizing regulations within one year and build the system within three years. It is expected to authorize EPA to require paper manifest users to submit their forms (or data) and pay a fee for processing, and to require a procurement process with a user fee-funded contract. The development of the fee schedule will be based on projected system costs and the volume of usage. The legislation also is expected to require the establishment of an Advisory Board to oversee system operation. It also may require regular audits and accounting for fee revenues and expenditures.

[1] Update: A bill authorizing the e-Manifest was introduced into the House on June 26, 2009. It is entitled the "Hazardous Waste Electronic Manifest Establishment Act" and can be found at http://thomas.loc.gov/home/gpoxmlc111/h3106_ih.xml.

- EPA will consider all stakeholder input to date as the process moves forward. The Agency will work on resolving issues that have been raised as it moves through the procurement and regulatory development process. It expects to continue to work with user groups in the future. Any additional comments may be sent to emanifest@icfi.com.

The facilitator then solicited any final comments and questions.

Mr. Fronczak asked when EPA would solicit the group's input again. Mr. LaShier said that, although this is the last of the scheduled webinars, EPA is willing to meet with the group on an ad hoc basis to discuss unresolved issues. For example, the regulations are expected to be straightforward generally, but the Agency still needs to deal with a number of issues, including integrating the e-Manifest system with the railroads' EDI systems. In addition, EPA will prepare an analysis of e-Manifest design alternatives this summer and is willing to reach out to participants if they are interested in providing input.

Mr. LaShier stated his belief that the webinars have helped to clarify many technical issues. He asked participants to discuss their general level of satisfaction with the webinar format.

Ms. Bell said that the format has worked well. She asked if the comments from this webinar would be available on-line. A response was provided that a detailed summary will be e-mailed to the group.

Mr. Fronczak, Mr. Hill, and Ms. LeBleu agreed that each webinar improved over the previous one. Mr. Fronczak and Mr. Hill also stated that this fourth webinar had the most detailed conversation because questions were e-mailed to participants in advance.

A participant asked if EPA knew how many manifests are used nationally now that there is a central registry of manifest printers. Ms. LeBleu expressed concern about determining the number of manifests used based solely on registry data. Registered printers must print a unique manifest tracking number (MTN) on each manifest and keep track of all MTNs printed. However, the number of MTNs printed does not equate to the number of manifests that have been used. For example, a number of printers produce batches of manifests and hold them in inventory until sale. Ms. LeBleu agreed to ascertain the number of MTNs that have been printed and share it with interested participants.

Mr. Hill asked if EPA could provide him a full list of the participants in the webinars since the e-mails sent from emanifest@icfi.com blind carbon copy (Bcc) their addresses. A response was provided that each webinar summary includes the e-mail addresses of participants. EPA uses Bcc on batch e-mails as a courtesy to addressees. This also avoids circulating incorrect e-mail addresses.

A participant asked if EPA knew which form of electronic signature would be used. Mr. LaShier responded that this issue has not been resolved yet.

A participant thanked EPA for its time investment in implementing the webinar series.

The facilitator thanked the participants for their attendance and input at the four webinars.

Mr. LaShier said that he looked forward to additional involvement and input from participants as the Agency moves forward with the e-Manifest.

III. E-mailed Comments about the e-Manifest

1. Following are five sets of comments regarding Webinar 4. They were e-mailed to EPA before or after the webinar. EPA thanks the commenters for their input.

Comments from Paula Canter of the Ohio Environmental Protection Agency (received June 19)

I expect that an integrated system will save the states money in terms of software support if they don't have to pay for licenses or in-house programming, but an oversight role still must exist for the states. However, there may not be a reduction in staff levels in states that currently have no manifest database.

I would be interested to know if states that have manifest databases currently have more of a workload for compliance assurance due to the availability of the information. Do they find additional violations by mining the data that non-manifest database states don't have access to?

Having a national manifest database would be very helpful to Ohio EPA and the public for researching waste information on generators who don't file the Biennial Report, either because they are too small or they are in violation of the requirement. Currently all Ohio has access to is in-state shipment data from waste receipts in the Biennial Report. Because there

is no re-notification requirement, we have hundreds of RCRA EPA ID numbers assigned to sites that we don't know if they are even in business any longer.

Comments on Slide 7 of Webinar 4 from Jack Griffith of the Florida Department of Environmental Protection (received June 22)

There is some legitimate concern that the Biennial Report not be included before any internal e-Manifest QA/QC reports are completed. It would be a better idea to compare the first round of manifest data to the same-year collected Biennial Report data to QA/QC the e-Manifest system (and the Biennial Report) or complete some pretty comprehensive e-Manifest QA/QC reports first. There easily may be some surprises from both ends.

Comments from Robert Fronczak of the Association of American Railroads (received June 24)

During the webinar yesterday, I addressed the questions posed prior to the webinar. I have received some additional input to the questions from our members as follows:

Question 1: In what ways do you expect e-Manifest to affect the **quality** of the work you do?

Answer During Webinar: Currently the hazardous waste manifest is the only paper document railroads have to handle. We have to key enter data from the paper manifest into our current EDI systems. That introduces the possibility of errors being introduced into the system. When asked if I had an order of magnitude number of the number of errors which might be introduced, I could not answer. If anyone has any ideas please let me know.

Supplemental Input: One large AAR member indicated that they have seen that the handling of a paper bill of lading is now such an exception one can expect anywhere from a 3 to 10% error factor.

Question 2: In what ways do you expect e-Manifest to affect the **efficiency** of the work you do?

Answer During Webinar: The answer to this goes hand in hand with the answer to question 1. By eliminating the key entry, we gain efficiency. I did not think that the e-Manifest would provide much benefit for reporting, because I thought our current electronic systems could summarize the

data, however as discussed in the answer to question 1, garbage in garbage out.

Supplemental Input: Using an electronic system to replace the paper manifest should eliminate any need for keeping copies of manifests for originating, terminating, and export shipments of hazardous waste.

Question 3: What lingering concerns do you have about the effect that e-Manifest could have on your operations? How significant or pressing are these concerns (*e.g.*, could they dissuade you from participating in the system)?

Answer During Webinar: I reiterated the issues we have raised many times, *i.e.*, that whatever EPA does, has to be able to accommodate our current EDI system. In addition, whatever EPA does with the signature, needs to be able to be adapted to our current EDI system.

Supplemental Input: We brought this matter up several times during the public meeting, but it would help the rail industry if the signature process could be eliminated for rail and we could treat the hazardous waste manifest in the same manner as a hazardous material shipment. By relying on the railroad's car tracking event codes (for origination, actual placement or interchange) and associated date/time records, all shipments can be traced electronically to an event that currently requires the railroad to either sign original manifests, collect copies of manifests from consignees, or sign and date manifests for export shipments, thereby obviating the need for these manual steps. This will positively impact quality and efficiency. Our concern is that EPA will develop a system that doesn't seamlessly work with the rail industry's EDI and car tracking systems and we'll still be required to manually account for these cars and maintain some sort of separate evidence of their movements and deliveries. As was discussed during the meeting in November, railroads handle approximately 1.9 million car loads of hazardous materials a year without such a signature requirement and over 30 million carloads in total without such a signature requirement, and have been doing so for nearly 40 years. It seems that the additional safety inherent to rail transportation coupled with our long standing history of handling electronic documents in a very efficient, structured and established manner would allow our industry some flexibility in this matter.

The current EPA schema is totally outside the American National Standards Institute (ANSI) X12 EDI Guidelines; for railroad use, EPA needs to run your schema through the Context Inspired Component Architecture (CICA) standards established by ANSI. There are no fields for car

initial/number, standard transportation commodity code (STCC), route, etc. In its present state it's totally unusable for rail movement.

Comments from Hope Wright of the Illinois Environmental Protection Agency (received June 24)

Thank you for the opportunity to comment on the planning for an e-Manifest system. There are so many issues yet to be resolved that listing benefits or costs is very nebulous.

We are gravely concerned that emphasis is being placed on the elimination of the Biennial Report at the same time as the e-Manifest system will be implemented. We would like to remind everyone that the export report was "supposed" to be available to all states for the 2001 report; therefore, the requirement to report exports was dropped from the federal reporting forms. However, it is still not available – the states who adopted this change in the instructions and USEPA have lost all data regarding exported wastes. Until we know that in fact the e-Manifest system works as intended, the requirements for summary reports should continue. Planning for it is certainly recommended, to be sure to capture all needed information at the outset, but dropping the reporting requirements at the time of implementation of an e-Manifest system should not even be on the table. Let's first get the bugs out and make sure corrections are being made in a timely manner. In fact, at least one complete reporting cycle should be done in tandem so the manifest and summary reports can be compared.

The system must be built to accommodate generators without RCRA ID numbers, as even federal law requires this – polychlorinated biphenyl (PCB) shipments being the prime example. TSDs also have to report all waste received, including from CESQG and un-manifested wastes, on the Biennial Report, so accommodating this on an on-going basis is a logical step if the goal is eventually to eliminate the summary report. As became apparent on Webinar 4, many states require use of the manifest for situations that are not required under RCRA, such as CESQG and state-regulated wastes. The system should be built to verify the company is not a SQG, based on address matching if there is no EPA ID number.

As one of the few states who had a manifest system and dropped it in favor of using the summary data provided by the annual (biennial) report, some of our experiences should inform the e-Manifest working group.

Initial entry of manifests of course was a significant work effort, but the proposed system would shift all entry to industry. As currently planned, the

primary burden will be on the receiving TSDs: we have concerns that this is reducing the intention of RCRA being a cradle-to-grave tracking system; therefore, the signature/certificate issue for generators must be considered carefully.

Correction of the manifests was even more of a manpower burden for our state, requiring three times the number of personnel as initial entry staff, due to errors on the paper manifest. Therefore, unless there are rigorous edits in place that must be corrected by industry before a record is considered "complete," the burden on either states or the contractor running the system would overwhelm the system. Without edits, the system will contain more errors than the current summary reporting system (in which errors are apparently of grave concern by headquarters staff and by states). If the individual shipment records are in error the summary data will also be in error, and will require correction work effort by both industry and states/contractor at the year of year reconciliation. Following are minimal edits that must be in place.

1. The ID numbers not only must be a valid number but must be verified by name and address against the RCRA data base. If there are discrepancies, a reasonable time to submit a revised or new notification form should be allowed, with subsequent correction to the manifest system mandatory.
2. All codes must be valid and blanks should not be allowed unless optional fields are included in the system to accommodate industry and state needs.
3. Both waste code/type and management code must be something for which the receiving facility is permitted and must make sense – for example, mercury shouldn't be fuel blended or burned at a cement kiln, as has sometimes been recorded!
4. Quantity must be reasonable; for example, trucks have weight limits so quantity/unit of measure (UOM) has to be under those limits – with higher thresholds only for rail and barge shipments.
5. Quantity and frequency of shipments must be checked against the generator status. If the monthly shipped amount exceeds the status limits, the company should be required to revise their notification or provide some sort of verification as to the source of the waste, that must be entered into the e-Manifest system – for example, one-time clean-out of outdated products, plant closure or bankruptcy, spill clean-up or other remediation. One-time or exceptional events should also immediately trigger any required summary reporting or state fees, as in our experience tracking down the responsible party for one-time events months later is frequently very labor intensive.

6. Since transporters who hold waste for more than 10 days may be a TSD for storage, the system should compare time between pick up at generator and delivery at receiving facility and flag the delays for follow-up.
7. The system should verify for states that have a transporter permitting program that the transporter has the required permit at time of shipment and flag those without one for compliance follow-up by the state.
8. In order to allow eventual elimination of summary reports, receiving facilities should be required to indicate both receipt and acceptance (equaling certificate of destruction or rejection), with corrections to waste information as necessary when their testing is complete. If the waste is not accepted, how the waste was handled must be tied to the manifest with the subsequent manifest information linked. We have seen partial load rejections occur 18 months after receipt, and any new system should flag those delays long before that occurs.

The system could, and probably should, track significant delays between receipt and acceptance. Particularly when there is a change on the part of a TSD or there is an increase in received shipments that have not been accepted, this would have the potential of alerting the states and regions there might be problems at a given TSD, and could reduce the amount of waste on-site if a TSD closes its doors suddenly.

Comments from Rene Anderson of the Idaho Department of Environmental Quality (received August 5)

Thank you to EPA for sponsoring the e-Manifest webinars and providing the opportunity for stakeholders to comment. As previously mentioned by other webinar participants, the format of the last webinar (providing questions in advance for participants to have prepared answers to) seemed to work particularly well.

Idaho's responses to the Webinar 4 Discussion Questions follow:

Question 1: In what ways do you expect e-Manifest to affect the quality of work you do?

Idaho previously has not had the resources to maintain any type of manifest program or even regularly require copies of manifests for any purpose. However, we do require HW generator annual reports from LQGs and SQGs. Idaho would anticipate having timely electronic manifest access to be a positive tool useful in tracking potential report

filers before or during the reporting cycle rather than after the fact as well as potentially confirming information received through reports. This theoretically also should lead to increased compliance rates and fewer enforcement actions.

While many details (ably identified by others) still need to be worked out in order for an e-Manifest database to replace federal level hazardous waste biennial reporting, Idaho has long anticipated the reduced burden of biennial reporting to hopefully all parties involved through some sort of electronic means (quarterly TSDF reporting, e-Manifest, etc.).

Question 2: In what ways do you expect e-Manifest to affect the efficiency of the work you do?

As previously mentioned, Idaho would anticipate being able to better coordinate HW generator reporting on a state annual level and the federal biennial level. Since HW sites have a tendency to not always notify when their generator status changes and TSDFs are not required to provide such information, being able to better identify ALL SQG and LQG sites for a state annual reporting cycle upfront based on manifest information, rather than just last known or reported generator status, would help Idaho be more efficient in compiling more correct yearly totals published in its annual report.

Question 3: What lingering concerns do you have about the effect that e-Manifest could have on your operations? How significant or pressing are these concerns?

Costs that might be assessed states or specialized computer needs that might be expected of states beyond an ordinary internet connection in order to be able to make use of the e-Manifest system could pose a hardship for Idaho.

2. On June 30, Ms. Wersterfer e-mailed EPA about manifest tracking numbers (MTNs) on electronic manifests. She asked for clarification on the type of numbering scheme to be used.

EPA appreciates the question and is clarifying that the current regulations require MTNs for paper manifests to include nine digits followed by a unique 3-letter suffix. EPA and its contractor will determine an acceptable MTN scheme for electronic manifests down the road as the system is being designed and built.

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